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I also certify that the attached copy of the request for grant of a Patent (Form 1/77) bears an amendment, effected by this office, following a request by the applicant and agreed to by the Comptroller-General.

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Dated 18 November 2003

An Executive Agency of the Department of Trade and Industry

nts Form 1/77 THE PATEN .ts Act 1977 (Rule 16) I B OCT 2002 The Patent Office Request for grant of a patent (See the notes on the back of this form. You can also get an Cardiff Road explanatory leaflet from the Patent Office to help you fill in Newport this form) 16 OCT 2002 South Wales NP10 8QQ Your reference 2. Patent application number 0224052.1 (The Patent Office will fill in this part) Full name, address and postcode of the or of BRIAN HARTLEY each applicant (underline all surnames) 12, OAKLEY AVE. BROCKWELL CHESTERFIELD Patents ADP number (if you know it) 5404DS If the applicant is a corporate body, give the 3725627002 country/state of its incorporation Title of the invention PAINT SPRATING DEVICE SWINDELL L PEARSON 5. Name of your agent (if you have one) H& FRIAR GATE "Address for service" in the United Kingdom AS to which all correspondence should be sent (including the postcode) B Patents ADP number (if you know it) 00001578001 Date of filing Priority application number If you are declaring priority from one or more Country (day / month / year) (if you know it) earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number Date of filing 7. If this application is divided or otherwise Number of earlier application (day / month / year) derived from an earlier UK application, give the number and the filing date of the earlier application Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' tf:

a) any applicant named in part 3 is not an inventor, orb) there is an inventor who is not named as an

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applicant, or

See note (d))

Patents Form 1/77

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Continuation sheets of this form

Description

Claim(s)

Abstract

Drawing(s)

1 PAGE 3 DRAWINGS

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature B. Hartley Date 15/10/02

12. Name and daytime telephone number of person to contact in the United Kingdom

01246-550047

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PAINT SPRAYING DEVICE

This invention relates to paint spraying devices which are hand held.

One problem associated with paint spray devices is the frequent need to clean them after use and also that they can require frequent topping up with paint. They can also be a strain on the hand particularly when a paint dispenser is full and attached to the spray gun head.

There are at present spraying devices which are hand held and attached by a tube to a separate canister. There are also spray guns with canisters attached; these can also be expensive.

The following invention seeks to provide a method whereby the operator of such products can have a cheap alternative and the versatility provided by a device which is also easy to clean.

The main driving force of the device is provided by an electrically operated vibrator which can use the mains electrical supply or a battery.

The section containing the vibrator has no handle and this allows it to be fitted to the top of a tin containing a suitably diluted liquid which will pass easily through a spray jet head, for example fence protective liquid. This reduces the necessity to keep frequently filling a separate container which is usually attached to such spray guns. It also reduces the need to have to clean containers after use.

To enable the vibrator mechanism to be fitted to the top of a tin containing paint, a hole has to be made in the lid; this is done by the use of a specially shaped spike which can be hammered or pushed into it. The bottom of the vibrator mechanism has a threaded section which is placed through the hole and a collar is then screwed onto this when the lid has been removed. A rubber washer is used between the threaded section and the collar to stop any leakage of paint. The section which is threaded has a piece shaped in the centre to allow a tube with filter on the bottom to be pushed into it. Also a hole is provided to allow air to enter the tin when the liquid is sucked out of it. Several tubes varying in length with detachable filters can be provided to reach to the bottom of tins that vary in depth, or a flexible tube could be used.

A small bore tube is connected to the output side of the spray device with a handle equipped with a jet attached to the other end. The tube and handle can be made cheap enough to throw away after use, and even the piston mechanism can be made cheap enough to throw away to alleviate the need for cleaning.

Should the need arise for a small quantity of paint to be thinned, this can still be used in a separate container which has a handle attached to it, unlike most spray guns, which have the handle attached to the vibrator section. To operate the vibrator when it is connected to the mains or batter voltage supply, a switch is suitably positioned on the side of the body containing it. The switch is situated so that it can be suitably operated because the separate container's handle lines up with it. This is possible because the section housing the vibrator mechanism has a section either side of it that protrudes and has holes through them. These line up with sections that protrude on the separate container; two screws are used to secure them together and a rubber seal is fitted between to stop any liquid which may be in the container from leaking out.

Embodiments of the present invention will now be described by way of example only, with reference to the accompanying drawings in which:

- Fig 1 This is a side view of the section containing the vibrator mechanism fitted to a tin of fence paint.
- Fig 2 This shows the tool ready to pierce the tin of liquid.
- Fig 3 This is a side view of the separate paint container vessel.

Referring to Fig 1

A shaped section 1, of material which contains a vibrator and a pump mechanism is attached to a tin of paint 2, using a collar 3, which is threaded onto a section of the shaped section 1, which has been passed through a hole in the lid 4, and is also threaded to accept it. A tube 20, attached to it, with a filter 21, on the end, and this passes down into the bottom of the liquid in the tin 2.

Referring to Fig 2



This shows a tool 5, with a spike on the end 6, this is either hammered or pressed into the lid 7, of the tin of paint 2, to create a hole for the threads on the shaped section 1, Fig 1, to fit through and then be held in position by the collar 3, Fig 1. the tool 5, has a section 8 which protrudes around its circumference to prevent it being driven too deep into the lid, 7.

Attached to one end of the shaped section 1, fig 1, is a flexible tube 9, the other end of the tube is fitted to a handle which is hollow to allow the liquid to pass up it to a jet 11, which is screwed onto the end. The liquid from the tin of pain 2, can then pass from the tin when the vibrator has been connected to the electric supply, it will then spray 12, out of the jet 11.

To connect the vibrator to the mains electrical supply a cable with a suitable plug head 14, is used. the switch 22, Fig 1 is used to switch the electrical supply on or off.

Referring to Fig 3

This shows a separate container 15, for use when paint has to be thinned before use. The shaped section 1, Fig 1, has flanges 16, which protrude either side with holes through them. When the separate section 1, is placed on the top of the separate container 15, these line up with flanges 17, which has holes in them and are threaded. Two screws 18, are used to secure them together, a rubber washer 19, stops any leakage.

Whilst endeavouring in the foregoing specification to draw attention to those features of the invention believed to be of particular importance, it should be understood that the Applicant claims protection in respect of any patentable feature or combination of features hereinbefore referred to and/or shown in the drawings, whether of not particular emphasis has been placed thereon.



